

BROADBAND EXPANSION GRANT APPLICATION -- FY 2022

Primary Applicant (Name and Address):

UScellular

8410 W. Bryn Mawr Avenue, Suite 700

Chicago, IL 60631-3463

Applications MUST be UPLOADED to ERF via the Commission's website, http://psc.wi.gov/apps35/ERF_upload/content/mymen u.aspx. Refer to section 2.3 for detailed instructions.

Applications are due and MUST be uploaded to ERF no later than: March 17, 2022, at 4:00pm (16:00) Central Time. Late applications will not be accepted.

Contact for further information:

PSCStatebroadbandoffice@wisconsin.gov

Date:

March 17, 2022

The Public Service Commission of Wisconsin is seeking applications for Broadband Expansion Grants. The Commission may award one or more grants during Fiscal Year 2022 to public and private entities that meet the eligibility requirements set forth in Wis. Stat. § 196.504. This grant round will be funded with bond proceeds authorized by the Wisconsin Building Commission pursuant to Wis. Stat. § 13.48(30). As such, successful applicants are subject to the requirements of Wis. Stat. § 13.48(30). Successful applicants will demonstrate a clear and achievable plan to improve broadband communications services in one or more underserved areas in the State.

Applicant Certification: In signing this application, the undersigned verifies under penalty of perjury that the Applicant and its employees and agents have not, either directly or indirectly, entered into any agreement or participated in any collusion or otherwise taken any action in restraint of free competition with respect to this application; that no attempt has been made to induce any other person or firm to submit or not to submit an application; that this application has been independently arrived at without collusion with any other proposer, competitor or potential competitor; that this application has not been knowingly disclosed prior to the opening of applications to any other applicant or competitor; that all of the responses and representations of Applicant in this application are true and correct to the best of the undersigned's knowledge, information, and belief; and that Applicant agrees to, accepts, and will comply with all of the terms and conditions respecting this application and any award of a broadband expansion grant as may be established in a grant award Agreement.

Name of Authorized Representative (Type or Print)	Title	Phone
M. Austin Summerford	VP Business Development & Partnerships	773-399-4850
Signature of Authorized Representative	Date March 17, 2022	



SUMMARY OF GRANT APPLICATION

SUMMING OF C	RAIVI AIT LICATION	
Primary Applicant Name	Amount of Broadband Grant Request (round to nearest dollar)	
UScellular	\$1,227,065	
Federal Employer Identification No.	Amount of Matching Funds Pledged (round to nearest dollar)	
36-4046814	\$625,885	
Contact Name and Title	Total Cost of Proposed Project (round to nearest dollar)	
Austin Summerford, VP Business Development & Partnerships	\$1,852,950	
Telephone Number	Project Name	
773-399-4850	UScellular - Township of Morrison Broadband Expansion	
E-mail Address(es)	Type of Proposed Broadband Service (FTTH, Cable, DSL, etc.)	
Austin.Summerford@uscellular.com	5G Fixed Wireless Access Broadband	
Grant Manager, if different than Primary Applicant	Type of Proposed Project (Last-mile, Middle-Mile, backbone, other)	
N/A	Last-Mile	
Grant Manager Contact Name	Grant Manager Email Address and Telephone Number	
N/A	N/A	
If the application proposes a public-private partnership, list the names, addresses, and FEINs of the partner companies or organizations		
Township of Morrison, 4207 Hill Road Greenleaf, WI 54126		
FEIN: 39-1423696		
Brief Project Description (2 sentences)		
UScellular proposes a Fixed Wireless Access expansion of broadband service in Morrison, delivering speed at a minimum of 100/20 Mbps to 451 currently unserved and underserved homes and businesses by the end of 2023. Further, UScellular will enhance speed to an additional 481 unserved and underserved households including approximately 100% of homes and businesses in the Township with a minimum of 25/3 Mbps service. The infrastructure investments in this project will also significantly improve mobile service in this area of Brown County area.		
Maximum Proposed Download Transmission Speed	Maximum Proposed Upload Transmission Speed	
100 Mbps	20 Mbps	
*Actual speeds may exceed 100 Mbps DL based on location.		
Minimum Proposed Download Speed to Customer Location	Minimum Proposed Upload Transmission Speed to Customer Location	
25 Mbps	3 Mbps	



County or Counties served by this project	Community or Communities served by this project
	2X X X X X X X X
Brown County, WI	Township of Morrison, Unincorporated Greenleaf, Village of Denmark
List of the broadband service providers, if any, currently serving the a	area the applicant proposes to serve:
vendor supplied data from Cost Quest Associates, feedback from Bro	is underserved with the current broadband service. Our analysis, utilizing
Does proposed project serve an <u>unserved</u> area of the State, as defined in <u>Section 1.4</u> of the application instruction? (yes/no) Yes	Is the Applicant certified as a Broadband Forward! Community or Telecommuter Forward! Community, or does the grant project propose to serve a Broadband Forward! Community or Telecommuter Forward! Community? (yes/no)
	No
For last mile projects or component, the expected number of Business Locations that will have access to the improved broadband service (i.e., total business locations passed or with new service access).	For last mile projects or components, the expected number of Residential Locations that will have access to the improved broadband service (i.e., total residential locations passed or with new service access).
128	2,606
Of the improved business locations, how many loc are unserved?	Of the improved residential locations, how many are unserved?
16	225
For providers that are eligible telecommunications carriers will the proposed broadband service be available to Lifeline customers?	Are there any programs available for low-income households to access low-cost service or discounts? (yes/no)
(yes/no)	Yes, including low cost plans, and Federally funded Lifeline and ACP.
Yes	
Is the internet service provider currently participating in the Emergency Broadband Benefit Program? (yes/no)	Is the internet service provider currently participating in the Department of Public Instruction and CESA purchasing's Digital Learning Bridge? (yes/no)
Yes – The EBB program has now officially evolved into the Affordable Connectivity Program. (See above)	No
Did the internet service provider participate in the Public Service Commission's voluntary Broadband Coverage Data Collection in 2021? (yes/no)	
No, our 5G Fixed Wireless Access product offering was not available at the time of submission.	

Summary of Project Budget and Funding Statement

UScellular has provided totals in this section and filed a confidential unredacted excel and "Confidentiality Request Form" citing reasons. Additional detail on project expenses is available in a non-Public forum for PSC use at its request.

FY22 Broadband Expansion Grant Application Budget & Income Summary



Please complete this form using Microsoft Excel. A PDF copy must be attached to your application as page four. In addition, this form must also be uploaded to ERF in Excel format.

Grant Summary		
Grant Applicant: United States Cellular Corporation	Project: UScellular - Town of Morrison Broadband Expansion	

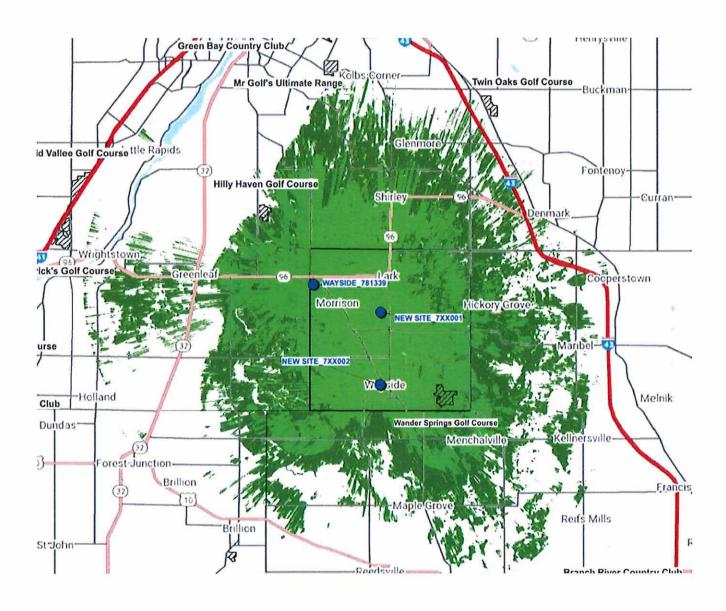
Line:	Description / Category:	. 8	Grant Funds:		Match:		Total:
1	Contractual, Consultant Fees	\$	242,900.00	\$	104,100.00	\$	347,000.00
2	Equipment	\$	981,750.00	\$	420,750.00	\$	1,402,500.00
3	Supplies					\$	
4	Labor (Salary, Fringe)		N N			\$	*)
5	Permitting, Licensing Fees	\$	2,415.00	\$	1,035.00	\$	3,450.00
6	Travel					\$	*
7	Other			\$	100,000.00	\$	100,000.00
		\$	1,227,065.00	\$	625,885.00	\$	1,852,950.00
	Total:			33.8	8% match requ	ested	

Pledged Contributions					
#:	Entity:	Entity Type:	Pledge Type:		Pledge:
1	UScellular	Applicant	Cash	\$	525,885.0
2	Township of Morrison	Partner	Cash	\$	100,000.0
3					
4					
5					
6					
7	8.5				at i
8		-			
9					
10					V
	•	•	Total:	\$	625,885.00



MAPS

The map below depicts UScellular's proposed coverage enhancement to provide broadband at 100/20 Mbps (light green) and 25/3 Mbps (dark green). Blue DOTS represent cell towers, with new towers to be constructed labeled as NEW. The tower infrastructure investment also provides the supplement benefit of significantly enhanced mobile coverage. The Town of Morrison is outlined in black. The project benefits will extend beyond the Town borders to adjacent communities.





Mandatory Applications Requirements (Application Reference 3.2)

Applicant Identification and Contact Information (Application Reference 3.2.1)

a. The name and address of the entity applying for the	Name: UScellular
grant, and the mailing address, telephone number and e-mail address of one or more contact persons	Address: 8410 W. Bryn Mawr Avenue, Suite 700
representing the applicant.	Chicago, IL 60631-3463
	POC Name: Mr. Austin Summerford
	Phone: 201-289-9379
	Email: Austin.Summerford@uscellular.com
b. If the application proposes a public-private	Town of Morrison Chairman, Tom Kempen
partnership, the identity and contact information for all application partners.	920 858 9114 <u>v20111@yahoo.com</u>
application partiers.	Brown County Chairman Buckley, August Neverman
	920 448 4015 BC_County_Board@browncountywi.gov
c. The application must show that the applicant is an organization, a telecommunications utility, or a city, village, town, or county that has established a legal partnership or joint venture arrangement with an otherwise qualified organization or telecommunications utility, and as such meets the eligibility requirements set forth in Wis. Stat. § 196.504(1).	UScellular confirms that it meets the eligibility requirements set forth in Wis. Stat. § 196.504(1).

Description of the Project (Application Reference 3.2.2)

UScellular is a leader in bridging the connectivity gap in Rural America.
UScellular has over 1000 towers in Wisconsin and is actively advancing its 5G Technology.

Defining The Need. Based on the Wisconsin PSC mapping, the Town of Morrison's ongoing broadband evaluation and UScellular's analysis, many citizens lack affordable access to 25 Mbps download/3Mbps upload internet speeds. This speed is the definition established by the Federal Communications Commission (FCC) for web surfing, video conferences, streaming services, remote work, education, and healthcare. In fact, some of the households in this project have less than 5/1 Mbps DL/UL prohibiting them from participation in the benefits of our digital economy.

The lack of broadband further restricts economic and business development essential to population and community growth. It also hinders remote education opportunities and conveniences such as telehealth.

The impact of the Covid-19 pandemic has accelerated the need for investment, creating urgency for innovative, fiscally responsible, and quick-to-deploy broadband improvement plans. In response, government programs, at various federal, state, and local levels, have created a great opportunity for public-private collaboration to address this situation.

1



Providing a Solution. At UScellular, our mission centers around connectivity. We have always focused on the needs of rural, often underserved, areas in rural America. Most recently, we have begun to provide the latest 5G wireless technology across Wisconsin where economically feasible to do so. As in the past when rural areas in America lacked universal access to electricity, low population density in some areas makes it difficult to justify investment without government subsidies. We can fix this. The combination of our technical expertise, coupled with grant programs like the Wisconsin Broadband Expansion program, enable us to help close the digital divide regardless of how geographically dispersed the population may be.

Our solution begins with cell towers and then takes advantage of one of the most advanced elements of 5G technology, Fixed Wireless Access (FWA). It is a "last mile" solution that delivers broadband connectivity to homes and businesses in rural areas at reasonable cost and without long timelines associated deployment of typical wired solutions.

FWA KEY BENEFITS:

- Broadband and Mobility
- Fast to Deploy
- Fiscally Responsible

The infrastructure investment used to provide FWA broadband also provides the equally important benefits of 5G coverage — connecting people at home and work or on- the-go. The same areas that lack broadband access, also often lack mobile wireless coverage. In fact, CostQuest Associates predict the next digital divide will be getting 5G

to rural America and a price tag for that is an incremental \$36 billion. It makes good economic sense for rural America to get both remedies in one shot through wise infrastructure investing.

Our proposed investment project is \$1.85 million, consisting of two initial phases with completion as soon as the end of 2023. UScellular will continue to partner with Morrison to explore future phases, particularly when the Infrastructure Investment and Jobs Act (IIJA) funding is finalized and becomes available. UScellular' has also made other recent investments that support this area by acquiring additional wireless spectrum which will be utilized in this solution.

Static Map. (Application Reference 3.2.2.a)

The "Static Map" and description is show in the Map section above. It describes the project area in entirety, the areas of impact by broadband speed and the location of new infrastructure.

25-3

https://www.dropbox.com/s/4hcf1pponwkovua/BB%2oApp%2oUScellular%2oTown%2oof%2oMorrison%2o-%2025-3%2oShapefiles.zip?dl=o

100-20

https://www.dropbox.com/s/dv1vrt59lllxvpl/BB%20App%20UScellular%20Town%20of%20Morrison%20-%20100-20%20Shapefiles.zip?dl=0

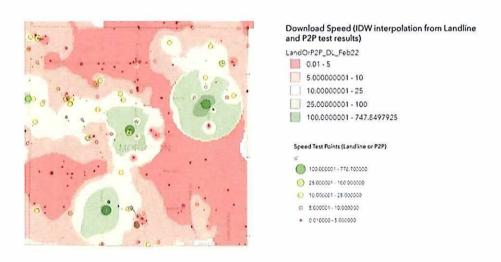


Census Block. (Application Reference 3.2.2.b)

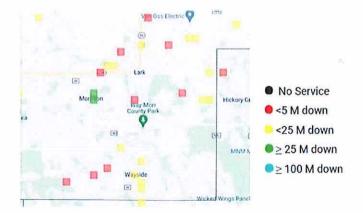
If the project area lies within a census block designated as served on the PSC Broadband Map, provide additional documentation to demonstrate the actual broadband service that is available in the proposed project area.

UScellular provides this evidence of deficient service in Morrison, WI

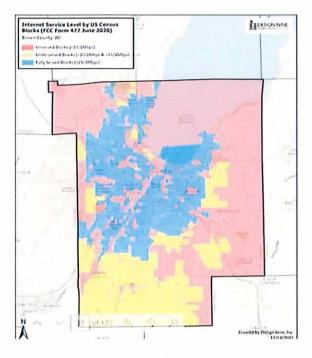
- Cost Quest Associates, the data analytics firm engaged by the NTIA for broadband mapping, shows that our project will provide coverage to 241 unserved and 691 underserved locations per the definitions of service provided by the PSC.
- UScellular attached testimonial letters from residents of Town of Morrison on deficient broadband service.
- Brown County provided further analysis based upon locally engaged surveys and other sources that show deficient coverage in the community.



OOKLA analysis







NEWNORTH REPORT MAPS

Broadband Access Increase (Application Reference 3.2.2. c)

UScellular will expand broadband access by building two (2) new cell towers, acquiring, and activating radios on Mid-Band Spectrum and providing access to advanced Customer Premises Equipment (CPE), designed specifically for rural applications.

Table Broadband Accessibility

Broadband Accessibility	
Potential and expected number of households served, including number of unserved and underserved	2,606 Unserved: 225
locations.	Underserved: 679
Potential and expected number of businesses served,	128
including number of unserved and underserved	Unserved: 16
locations.	Underserved: 12
Expected number of seasonal residents and tourists	Information not available but noted not relevant in
served.	volume.
Estimated download and upload speed of the broadband service packages available for purchase.	25/3 Mbps through 100/20 Mbps

Last/Middle Mile or Backbone (Application Reference 3.2.2.d)

UScellular's proposed project targets the last mile of the broadband infrastructure.



Broadband Service Description (Application Reference 3.2.2.e)

This UScellular project will deliver broadband by:

- 1) Enhancing elements of existing cell tower.
- 2) Building 2 new 250 foot cell towers.
- 3) Activating highly reliable, licensed mid band spectrum.
- 4) Providing access to Customer Premises Equipment (CPE), specially designed for rural use.

Note: UScellular's statement of service reflects unserved and underserved households without a provider of 25/3 service. All other household are assumed to be served, even though the definition of underserved permits those being served by one provider. As such, the underserved households claimed is lower than the actual number our service is likely to benefit.

Table: Project Phases and Benefits

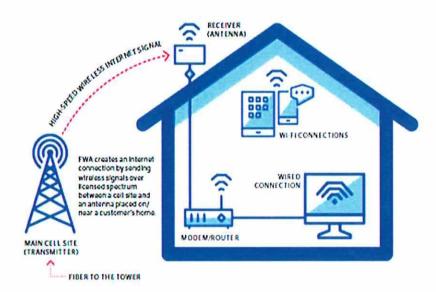
PHASE	DESCRIPTION	BENFIT/OUTCOME
Phase 1:	Specialized CPE will be available in Morrison on the existing low band spectrum network. New service available within 90 days of grant award.	UScellular will deliver Broadband Internet at minimum of 25/3 Mbps, covering additional 362 households in proximity to the tower. Speeds may exceed 25/3 Mbps in locations nearest the tower and it's possible to attain 50/5 Mbps in some locations.
Phase 2:	Construct a total of two new cell towers with heights of 250 feet. Acquiring and deploying radio equipment to activate mid band spectrum on 3 towers. (2 new /1 existing) Target Completion by 12/31/23 without unforeseen delays	Minimum of 100/20 Mbps covering 127 currently unserved (<5/1) and 324 currently underserved (<25/3) homes and businesses in Brown County. Further, broadband Internet at minimum 25/3 Mbps for an additional 114 currently unserved and 367 currently underserved homes and businesses. This investment will also significantly improve mobile performance in the areas surrounding the towers.
Future Phases	To be developed and will be focused on where additional infrastructure is needed to further improve service.	Our solution provides improvement now and ongoing partnership with the town Morrison over a multi-year period.



Technology to be used. Fixed Wireless Access (FWA) is a wireless solution for broadband connectivity for homes and businesses. An antenna on the home or business connects wirelessly to a nearby cell tower via a targeted wireless signal, providing high speed internet. The tower is connected to the internet through a combination of microwave and fiber technologies.

Once the signal is received by the antenna, an in-home router enables further connection to devices through WI-FI, just like a traditional wired connection works today. And, all this is accomplished without the burdens of extended deployment times and complex laying of cables, right of ways, and pole connections.

UScellular's wireless broadband solution is above and beyond previous versions of fixed wireless



internet service delivered in rural America which operate without carrier grade standards and on unlicensed spectrum. In fact, UScellular FWA is delivered securely and reliably based on the adoption of the most advanced international standards and using our dedicated licensed spectrum. Only UScellular has access to the spectrum used in this project, allowing us to carefully control the user experience.

One of the most exciting aspects of FWA is the dual benefits investment in wireless infrastructure provides. For the investment made, citizens of Morrison will receive both improved internet connectivity in the home and on-the-go. Our experience shows that people aren't satisfied unless they have both a quality home broadband and mobile brand experience, and we don't believe they should have to choose one or the other. When applicants for the Emergency Broadband Benefit were given a choice between broadband at home or mobile cell phone broadband, 2/3 of eligible households chose the mobile solution illustrating t-e need for affordable connectivity of all types.

The Benefit.

The combination of higher speeds for in home/business broadband and better cell coverage on-the-go will produce numerous lifestyle and economic development benefits for the community.

Fixed Wireless Access Provides Three Key Benefits 1. Support for both Home Broadband and Mobility 2. Faster time to market 3. Lower cost to deploy

Project Schedule (Application Reference 3.2.2.g)

Project Timeline

Project Phases	Timeframe
Phase 1: Upgrade	New CPE antennas and subscription plans will be launched within 90 days of grant award.
Phase 2: Expand	Final Design, Site Acquisition, Site Construction, Mid-Band Spectrum Activation, Testing will be completed by 12/31/23 assuming no unforeseen delays.

Itemized Budget (Application Reference 3.2.3)

Equipment Price List. (Application Reference 3.2.3 a)

All towers and equipment would be wholly owned by UScellular. The land on which each tower site sits may be owned or leased by UScellular.

Note: In addition to the summary of Project Budget displayed earlier on Page 3, this section requested an equipment price list. UScellular has filed a "Confidentiality Request Form" citing reasons for confidentiality. A detailed breakdown of project expenses will be available in a non-Public forum for PSC use at its request.

Intent to not Subsidize. (Application Reference 3.2.3 b)

All costs will be applied to the construction of the broadband infrastructure. No operating costs or customer expenses will be subsidized using Grant dollars.

Application of Grant Funds. (Application Reference 3.2.3 c)

UScellular will build 2 new Cell Towers and add Mid-Band spectrum radios to support our project. All Project planning and expenses will occur during the performance period.

Priority Factors Supporting the Application (Application Reference 3.2.4)

Matching funds. (Application Reference 3.2.4a)

UScellular and the Town of Morrison are committed to providing funding this Broadband Expansion project's capital requirements and community adoption.



Below is the financial overview and attached is the resolution that supports the partnership commitments:

• UScellular Matching Funds Contribution: \$525,885

• Town of Morrison Contribution: \$100,000 (adoption-digital equity & literacy)

PSC Broadband Expansion Grant Contribution: \$1.23 M

Total project: \$1.85M

In addition to the above contributions, UScellular recently invested in dedicated licenses for mid-band spectrum in an FCC auction that enables this project. Further, UScellular has committed financially for consumer adoption support by offering free antenna installation and reduced equipment prices for early adopters.

Public-private partnerships. (Application Reference 3.2.4 b)

How it came together. UScellular responded to a request by Brown County/Town of Morrison to evaluate, collaborate and propose solutions to improve broadband service in its community.

Over several months, UScellular experts met with County and Town officials to assess the opportunity. UScellular evaluated emerging county research and coupled it with its own licensed data analytics to understand service availability and consumer needs. Through this process we learned of a high volume of demand for enhanced broadband. Citizens also let us know they need improved wireless mobility coverage to compliment it, making fixed wireless access the perfect solution for Morrison.

Following that evaluation, UScellular engaged its experienced radio frequency engineers, to create multiple design iterations for County and Town officials. They designed for the rural, sparsely populated nature of the Township (36.43 sq miles, 44 pops/sq mile).

These resulted in our final project review presented at a Town of Morrison community meeting, at which time the Town approved a resolution of support and commitment of \$100,000 in community funds after a period of questions & answers. Upon award, those funds will specifically go towards increasing adoption of broadband services within the township.

Bridging the gap. Town citizens were also highly interested in how UScellular would work to make the service affordable, driving adoption and use. UScellular is providing multiple subscription plans, one of which is "no cost" after ACP benefits for eligible households. UScellular is also providing promotional discounts for CPE and importantly, the Town of Morrison plans to do the same using their \$100,000 contribution to the project.

UScellular is excited about this partnership and plans to continue its collaborative relationship with Brown County and the Town of Morrison, as further Wisconsin PSC programs are developed using funds from the recently passed Infrastructure Investment and Jobs Act (BEAD).



Identified Elements of Public Support from Morrison:

- Town Resources to understand community needs.

- Town & County assistance in managing construction and operations expenses through streamlined permitting, supplier collaboration, site selection, public land use and lease negotiation assistance.

Digital Equity & Literacy - proactive awareness, education programs and direction to

federal assistance programs.

Financial contribution to the broadband expansion program.

Identified Elements of Private Support from UScellular:

- **Invest** in the expanded network infrastructure.

- Establish a Broadband Support Hotline for identifying ongoing needs.
- Provide communications to drive stakeholder awareness.

- Provide targeted zones for towers to seek public land use.

- Provide a range of highly competitive plans to meet the needs of various consumers.

- Provide early adopter discounts to offset up-front costs.

- Provide access to federal programs, such as the Affordable Connectivity Program.

Jointly participate in community events to accelerate adoption.



Town of Morrison-Brown County Letter of Resolution

Resolution: 02-2022

RESOLUTION AUTHORIZING BROADBAND EXPANSION IN THE TOWN OF MORRISON – BROWN COUNTY, WISCONSIN

WHEREAS, in order to address the substantial areas within the Town of Morrison that are unserved or underserved with access to broadband connectivity, both in home, business and mobile, the Town of Morrison conducted research to gather information and the interests of citizens and businesses, and to encourage providers to invest and provide services within, and

WHEREAS, Town of Morrison desires to pursue Broadband Expansion Grants offered by and through the State of Wisconsin Public Service Commission; and

WHEREAS, U.S. Cellular is willing and able to partner with Town of Morrison to provide the latest technical advancements in broadband coverage, affordable adoption and to seek all available grants to provide and subsidize the cost of necessary broadband infrastructure,

- U.S. Cellular Contribution: \$ 510,000
- Town of Morrison Contribution: \$ 100,000
- PSC Broadband Expansion Grant: \$1.1 M
- Total project cost is \$1.7 M

WHEREAS, Town of Morrison desires to pursue and make application for any and all grant money available for broadband coverage, and

WHEREAS, The Town Board considered U.S. Cellular's proven track record of bringing connectivity solutions to the Citizens of Wisconsin,

NOW THERFORE, BE IT RESOLVED, by the Town of Morrison, whose board assembled this 8th day of March, 2022, that the Town of Morrison board authorizes the application to the State of Wisconsin Public Service Commission for broadband expansion grants in partnership with U.S. Cellular.

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Date: 3-8-2022

Resolution: 01-2022

RESOLUTION AUTHORIZING BROADBAND GRANT APPLICIATION/PARTNERSHIP WITH TOWN OF MORRISON – BROWN COUNTY, WISCONSIN

WHEREAS, in order to address the substantial areas within the Town of Morrison that are unserved or underserved with access to broadband connectivity, both in home, business and mobile, the Town of Morrison conducted research to gather information and the interests of citizens and businesses, and to encourage providers to invest and provide services within, and

WHEREAS, Town of Morrison desires to pursue Broadband Expansion Grants offered by and through the State of Wisconsin Public Service Commission; and

WHEREAS, U.S. Cellular is willing and able to partner with Town of Morrison to provide the latest technical advancements in broadband coverage, affordable adoption and to seek all available grants to provide and subsidize the cost of necessary broadband infrastructure, and

WHEREAS, Town of Morrison desires to pursue and make application for any and all grant money available for broadband coverage, and

WHEREAS, The Town Board considered US Cellular's proven track record of bringing connectivity solutions to the Citizens of Wisconsin,

NOW THERFORE, BE IT RESOLVED, by the Town of Morrison, whose board assembled this 8th day of March, 2022, that the Town of Morrison board authorizes the application to the State of Wisconsin Public Service Commission for broadband expansion grants in partnership with U.S. Cellular.

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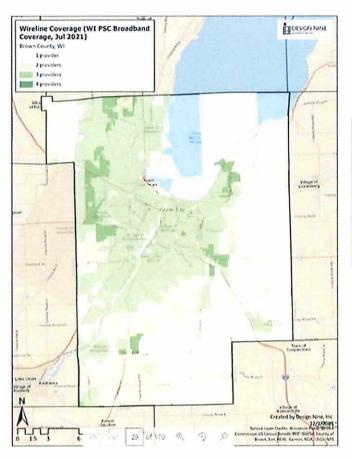
Funcaciona

Attest: Clerk

Date: 3-8-2022



Existing broadband service. (Application Reference 3.2.4 c)
Brown County Provider map showing lack of options in Morrison



CenturyLink	DSL
AT&T Wisconsin	DSL
Bug Tussel	FWA
T-Mobile	FWA
Bertram Internet	FWA
Ethoplex	FWA

Project impact. (Application Reference 3.2.4 d)
Project Area:

- Our **project area** includes the Town of Morrison, including unincorporated Lark and Wayside, and some adjacent areas beyond its borders.
- Morrison is highly rural at 36.4 square mile and population density at **only 44 people per square mile**. This low density of population makes Fixed Wireless Access, coupled with mobile broadband a fiscally responsible and effective solution.
- The counties primary industry is Agriculture Broadband & Mobility connectivity is essential to economic heath and the community's tax base.
- Given the intermittent consistency of service, coupled with aggressive consumer pricing, UScellular estimates robust service adoption.



Service Offered:

- 5G FWA Broadband will provide enhanced speeds of 100/20 Mbps to much of the unserved and underserved population within the town.

- To say the residents of Morrison just want this enhanced service is a gross understatement. In fact, they need this to fully experience American life as we know it today. This is supported by the volume and nature of comments from Morrison citizens.

UScellular Plans:

- UScellular plans to provide an Unlimited Broadband plan, with speeds of **25/3 Mbps** starting at \$30/month, with automatic payment.
- Further UScellular plans to provide an additional Unlimited Broadband plan with speeds of 100/20 Mbps starting at \$55/month, with automatic payment.
- For households eligible to enroll in the federal **Affordable Connectivity Program**, after discounts, the 25/3 Mbps plan will be delivered at essentially no charge, after the \$30 federal subsidy, to the end user.

Scalability (Application Reference 3.2.4 e)

- FWA broadband is scalable. Utilizing additional radios, towers, and spectrum. With UScellular's significant high-band spectrum, UScellular could expand capabilities and offerings as technology and customer demands evolve.
- The evolution of wireless services is ongoing and significant. There is reason to believe that 5G will continue to evolve in its capabilities and wireless researchers are already on the path towards development of 6G.
- UScellular will also continue to work with the Town of Morrison and Brown County to ensure that our offerings meet consumer demands.



BROADBAND EXPANSION GRANT APPLICATION TOWNSHIP OF MORRISON

Economic development. (Application Reference 3.2.4 f)

The UScellular project will stimulate economic development in Morrison.

Investment in broadband and mobility infrastructure creates jobs.

According to Deloitte Consulting, "a 10-percentage-point increase of broadband penetration in 2016 would have resulted in more than 806,000 additional jobs in 2019, or an average annual increase of 269,000 jobs. Moreover, we found a strong correlation between broadband availability and jobs and GDP growth. A 10-percentage-point increase of broadband access in 2014 would have resulted in more than 875,000 additional US jobs and \$186B more in economic output in 2019."1

1-https://www2.deloitte.com/us/en/pages/consulting/articles/bridging-the-digital-divide-with-broadband-for-all.html. And the substitution of the

Most notable about the economy of Morrison is the impact of agriculture on it. Morrison is dominated by this industry and seek to stay that way. Its rural areas are desirable for livability and economic growth except for the lack of broadband service availability. With only 4-5 home starts a year, the economy of Morrison has room to grow to increase tax base beyond its agricultural roots while maintaining its rural charm.

Special comments about the importance of connectivity to agricultural needs are included below in "current and future economic needs."

Brown County Executive, Troy Streckenbach commented,

"This expansion would give the town of Morrison a much-needed technological update that will increase our potential to grow as a community overall. Rarely do people want to move into an area with no internet access, so the project UScellular is proposing will provide an invaluable opportunity to help attract residents to the community.

Today's society is heavily dependent upon the benefits of reliable connectivity of all types. The recent pandemic accelerated the general understanding that areas in rural America were not ready to work from home, receive "telehealth" or take advantage of the other aspects of the connected lifestyle.

Suddenly, access to the internet became a primary criterion for where people chose to work and live. Rural communities that were ready benefited from a mass migration of people from large metro cities to sometimes rural, easy to live in, communities. This began to draw the direct line between broadband availability and home prices, and the associate tax base they provide.

Quality of education is often also tied closely to property values. Digital connectivity also plays a foundational role in the education system. The benefits of internet access & remote learning,



combined with the best in classroom teachers were already moving fast, but entered the highspeed lane over the pandemic year.

Broadband quality is also a factor in business effectiveness. Businesses use various platforms for communication between staff, customers, and partners. Digital communication is essential for daily operations in-house or remote.

A discussion of potential economic impact the project could have for an individual business located in the project area.

The owner of Resurrection Small Engine Repair stated the following:

"As the owner of Resurrection Small Engine Repair, I depend on a reliable fast internet connection to research the various engines that I work on, to determine specifications for engines, to order parts and check on delivery schedules. Fast, reliable internet service is crucial to the success of my business."

The owner of Colleen's Cakes stated the following:

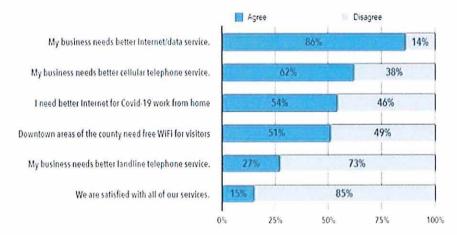
"I own/operate Colleen's Cakes, a small, licensed bakery in my home for over 40 years. In 2021 DATCP made it mandatory for all bakeries to also hold a Restaurant Managers license; I had to take an online program & an exam. The online program took me 16 hours to view, because of the POOR internet speed; I was required to take the exam with a Proctor. I paid an IT specialist to hook my computer for the exam; The speed of the internet was so poor at my home, I had to take it at the town hall.

What a mistake, it was a timed, 90 question exam. The internet connection timed out 3 times, I LOST everything; needed to get back in & start again. I did not pass; I blame the POOR internet in the area."

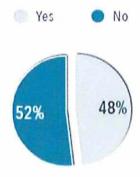


An explanation of how an improved download and upload transmission speed could better support a specific business in the project area.

This Brown County Survey Data depicts the need for improved speed for business. Coupled with the above case studies, it demonstrates need for our project.



. Does limited Internet access at employees' residences impact your business?



An explanation of the likely impact improved broadband service could have on residential property values.

Quality of digital life effects property values.

The direct and immediate effect on property values in the Town of Morrison is best addressed through these descriptive stories of resident nightmares that serve as examples of the important of broadband internet service in daily life.



"Through a request for a remote ballot, the township learned of the challenge of the owner of Victoria Flowers, in Greenleaf. She had to leave her home, opting to reside in another community, to complete her work assignments that required connectivity. After returning to the Township, she made multiple attempts to secure service; she was unable."

Joe and Marilyn Miles, of Greenleaf, have finally found some level of service through a WISP out of Idaho, but site the burden of high price for service that works "ok, but is expensive." They go on to site similar satellite options up to \$200/location/month. They simply want something "that works and is reliable," and through their comments, affordable as well.

A demonstration of how improved broadband service to a residential portion of the project could benefit a telecommuting population.

As flexible work locations continue to become the norm for many businesses, reliable, highperformance internet is essential to maintaining productivity and employment. Traditional urban dwellers are moving at rapid pace to smaller communities, often with lower costs of living, but only where there is supportive infrastructure. For employers, reliable connectivity solutions establish confidence in remote working arrangements, reducing the need for premature returnto-work decisions, lease expense and increased employee satisfaction. For employees, it provides the security and assurance that they can perform their responsibilities and continue to contribute to the workplace irrespective of location.

A travel agent, Laurie Daul of Greenleaf, lamented that she was not able to work from home due to lack of broadband service, requiring her health risk exposure to virus. She was one of three out of 200 employees that had to go in. When the company began a daily health check requirement, she had to visit McDonald's on the way to work to secure access. When she needed essential company communications, she needed to travel 10 miles to her sister's home in Kellnersville.

A demonstration of how the speeds and service being offered by the project fits with current and future economic needs of the community and local businesses.

The Town of Morrison is highly dependent upon agriculture as an economic driver.

Tom Kempen, Chairman of the Town of Morrison indicated that the Town is completely dependent upon agriculture" and that the bulk of the tax revenue comes" from farms.

The state of agriculture is increasingly connected. That includes farming facilities, remote buildings and in the fields. To remain competitive, farmers are relying on advances in technology,



like "precision agriculture," enabled by **Internet of Things (IOT)** based solutions, to stay competitive and not be left behind.

This is best demonstrated through the voice of **Collins Dairy**, **LLC**, who expressed support for UScellular's grant application saying,

"Our dairy business will benefit from improved connectivity. We face daily challenges with the production and health of our daily business, along with communication to other vendors. In today's world, technology is essential for all devices and communication, even on dairy farms. Our dairy farm needs and uses internet to retrieve important data and information about our cattle.

Broadband access increases efficient health readings for our cattle, communications from fellow businesses, feed and animal bedding deliveries, marketing for milk, crops, fuel and other raw materials across the state".

Effect upon broadband service to adjacent areas. (Application Reference 3.2.4 g)

Our broadband services would not interfere or impair broadband service in adjacent areas.

Other Supporting Information

Broadband Grant Experience (Application Reference 3.2.5 a)

Donadhand Oneut	Part of
Broadband Grant Experience Type	Project
7.1.1 Broadband	Examples:
Grant Project(s) Status	Empower Rural Iowa Emergency Broadband Expansion Program (NOFA #003)
	UScellular was tasked to modernize its network across 47 cell sites in rural lowa. This network modernization initiative delivers a minimum throughput of 25 DL / 3 UL Mbps wireless broadband services across 578 census blocks identified as Targeted Service Areas in 27 counties. Including areas outside of the Targeted Service Areas, the modernization of these sites projected to provide over 3,330 sq. miles of broadband service coverage and broadband availability to almost 37,000 lowa Households.
	Nebraska (NUSF) Ongoing Relationship
	U.S. Cellular requested NUSF support for ten (10) separate and discrete projects and sought approximately \$4.7 Million in support. U.S. Cellular committed to meeting or exceeding technical requirements of the program and provided a match to lower the cost of construction.
7.1.2 Broadband	Janesville, WI- Home Internet Plus
Non-Grant Funded Projects	In 2021, UScellular designed and implemented a Fixed Wireless Access broadband solution in this Wisconsin community utilizing high band mm Wave spectrum bringing speeds of 300 Mbps DL in a new product Home Internet Plus.



Broadband Infrastructure (Application Reference 3.2.5 b)

UScellular will not duplicate existing broadband infrastructure. The households submitted are limited to unserved and underserved, and does not include served areas outside of that. However, all areas within coverage will benefit although they are not being submitted as part of this application.

Financial Stability (Application Reference 3.2.5 c)

- UScellular is a \$4billion company, with over 5 million customers, publically traded and in good standing.
- UScellular has a long standing commitment to being a technology leader in Wisconsin.
- UScellular is affliated with Telephone And Data Systems, Inc., with its' Dun and Bradstreet report showing that the company has strong financial stability.
- Additional information on UScellular's financial position is included in the investor relations section of its website, www.uscellular.com.

Remote Healthcare Accessibility (Application Reference 3.2.5 f)

Telehealth is changing the nature of healthcare and health outcomes as we know it. More healthcare providers are now faced with delivering not only a high level of care, but also reliability of service when practicing remote. This is particularly challenging in rural areas, such as Morrison

- Mobile Healthcare is evolving. \$250 billion of U.S. spend could be virtualized.
- Remote Healthcare. More than \$1 billion virtual healthcare visits happen annually.
- Home Care is rising. 10,000 seniors turn 65 in the U.S. each day; most desire to remain in their own homes as they age.

UScellular offers healthcare organizations of all types, the ability to provide remote healthcare for patients through reliable internet connections. This includes internet for in home virtual visits, online consultations, remote patient outreach and remote monitoring. Home Health teams can securely gather and share patient intake data with a broader care team including specialists and primary care physicians.



We received this comment from a resident on the importance of connectivity to healthcare:

"My husband started at home kidney dialysis every night. (The center treatment costs over 6,000.00 a treatment, home treatment costs 3,500.00 a night.) A requirement is to take his weight/BP/vitals twice daily that transmits to the kidney center. The internet service would not work so DaVita constantly needed to call & instruct us what type of dialysis fluid to use. This could be a life/death situation if the WRONG fluids are used for an extended period of time."

In addition to the Doctor-Patient relationship, also important to rural areas of America, like the Township of Morrison is the connectivity available to the remote practitioner (i.e., nurse or social worker) traveling around the township for home health care. Broad connectivity is essential to maintain these functions.

Wisconsin Remote Healthcare example:

An extension of UW Hospital and Clinics operates a full in-home health care solution. They employ traveling medical staff that work with patients in homes. A combination of broadband in home and mobility allows them fully remote, secure communications back to the hospital, ensuring timely care. GPS tracking is also used for scheduling, safety, and accurate billing.

Remote Educational Access (Application Reference 3.2.5 g)

UScellular's broadband is suitable for video learning, online research, and meetings through all contemporary mediums, such as **ZOOM and Microsoft TEAMS**. Our project will allow teachers to extend learning both in and out of the physical classroom. Our comprehensive view of connectivity extends beyond the school or home. Imagine a teacher taking a class outside to learn about local plant life and students having the ability to research what they are seeing on a wireless device.

With close to 40% of households in the Town of Morrison having children under 18, the need for broadband for education is acute:

Dawn Kester, Community Director, Wayside Parkview Estates, said of this project,

"Investing in our community will not only support businesses, but also the children that reside in our community and the 5 school districts that they attend. This technology is an investment in our future generations."



Julie Ossman, of Greenleaf, WI said,

"Our household is struggling with connection. Our two children are using Chromebooks almost 100% of the time for schoolwork this year. The past week has seen multiple times with each child having to wait until their assignment "reconnects" to finish their homework.

Many times, I would do my work at 4;30 AM so I would be done by the time the kids would need to start school. Our daughter was taking an advanced placement exam and had to go to another location to complete if in fear of her exam not uploading."

Hillary Krahn of Greenleaf, WI also commented,

"Zion teachers were trying their hardest to teach in the isolation of their classroom through the internet, but the internet could not keep up with the demand. We'd lose the teach in the middle of the Zoom meeting, or they'd freeze, and part of the lesson would be missed."

Number of Students with Remote Educational Accessibility

The number of children enrolled in schools from Morrison is estimated at 451. While there are no public schools located within the Town of Morrison, students attend school in nearby districts such as East Depree, Reedville, Brillion, Denmark, and Wrightstown.

There are two private K-8 schools within the Town of Morrison boundaries. The Morrison Zion Lutheran School and the Wayside Lutheran School.

Remote schooling is still essential. While many students are returning to classrooms, there is still a significant number of students that need to quarantine for personal illness. When this happens, remote learning programs serve to keep the student from falling behind on current assignments, often a critical factor in ongoing education.

Public-Private Partnership Details (Application Reference 3.2.5 h)

Please see above section for full details of the public private partnership of UScellular and Morrison.

Additionally, UScellular's focus on "Locally Grown Wireless" empowers community action and is evident in these additional elements of Public Private Partnership in Brown County:

UScellular Community Connections: Supports donation to local organizations.

UScellular Jason Learning: Supports Classroom Projects

UScellular Boys and Girls Club Wisconsin: Ongoing Non-Profit Support



UScellular Hotspots to Low Income Households: \$13million nationally, to bridge the digital divide providing access to internet for students.

UScellular Gro Events: Community event sponsorship.
UScellular American Red Cross: Disaster Assistance

Contribution of Other Items

UScellular associates will conduct exercises in digital literacy for Morrison residents at the request of Town of Morrison officials. These exercises may be done in coordination with community events as it makes sense. There will no charges for this service. The work will be "In Kind"

Letters of Support (Application Reference 3.2.5 i)

Follow at the end of this application.

Equitable Factors (Application Reference 3.2.5 j)

Technical Support/Training

- UScellular offers **industry leading customer support** through technical chat and 800# telephone communications. Our technical support teams are in domestic care centers across America.
- Our Wisconsin based, Public Sector Account Team will help to simplify technology adoption and recommend ongoing solutions for better visibility and increased control over operations.
- UScellular maintains multiple full-service retail locations in Green Bay and nearby Appleton. Our award-winning associates are highly knowledgeable about this project. They will assist all residents universally, regardless of financial means, with technical questions regarding their service.
- UScellular will utilize our Mobile Experience Vehicle (MEV) to bring a portable store to local community events, host educational sessions on connectivity and provide products on location.



Promotion of Broadband Adoption

UScellular's commitment to promoting broadband adoption has 3 components:

Affordability

Highly competitive subscription plans for broadband service.

 Access to the benefits of the federally funded Lifeline and Affordable Connectivity Program (ACP)benefits.

For eligible ACP households, UScellular will offer a suitable subscription plan at "zero" cost after autopay and ACP monthly subsidy.

• ACP eligibility begins at 200% of poverty level. For a family of 4, that is \$53,650. The median Household income in Morrison is \$55,000K.

Acquisition

 Service Activation at any of our conveniently located retail stores, including our stores in Green Bay and Appleton.

Community demonstration and activation days in the community using our Mobile

Experience Vehicle (Store on Wheels) for the same.

o Providing monthly promotional adoption credits to offset acquisition costs including "free antenna installation" and monthly equipment discounts.

• Public Private Partnership

o The Town of Morrison has committed \$100,000 to the promote adoption of service which may include equipment credits administered by the county, and education sessions to promote internet use, aka Digital Literacy.

At its 3/16/22 County Meeting, Brown County discussed the potential of further

contributing county funds to support Town broadband projects.

Actual resolutions are included in the above Public Private Partnership Section.



ATTACHMENTS (Letters of Support)

COUNTY BOARD

Brown County

305 E. WALNUT STREET P.O. BOX 23603 GREEN BAY, VM 54305-3600 Patrick Buckley, Chairman

PHONE (920) 448-4015 FAX (920) 448-6221

Email: BC_County_Board@browncountywl.gov

March 16, 2022

Public Service Commission of Wisconsin Broadband Grant Office Attn: Steffany Powell Coker 4822 Madison Yards Way North Tower-6th Floor Madison, WI 53705-9100

Dear Ms. Coker:

On behalf of Brown County Board of Supervisors, I want to express our body's support of US Cellular Communications' broadband grant application and request that you approve the request.

Facilitating the improvement of broadband throughout Brown County is a key goal for the board. To that end, the Board created the Rural Broadband Subcommittee to gather more information regarding broadband services. Many residents throughout the county have provided and continue to provide feedback regarding inadequate service.

We encourage this project because it will benefit all residents in the covered area, in and around Morrison including students, people working from home, farms, retired residents using the internet for remote healthcare, and small businesses.

Access to reliable high-speed internet promotes a better business environment for multiple reasons. Remote employees can work and collaborate more efficiently with one another and engage with their customers, while making a huge difference for small businesses in 2022.

The virtual classroom solved problems during the pandemic but also created an increase in the digital divide. Students in areas without reliable high-speed internet are left behind in their studies while their peers, who have better access, continue learning unimpeded.

It will give the Town of Morrison a technology upgrade that will increase their potential to attract new residents and businesses, allowing them to grow as a community. People rarely want to move into an area with poor to no internet.

This is a positive step toward connecting every residence and business in Brown County. We see this as an opportunity to grow as a community and provide necessary services to the underserved.

Sincerely,

Patrick Buckley

Chairman of the Brown County Board of Supervisors



Morrison Town Hall 3792 Park Rd- Bertram Internet service

9/22/20 9:52 p.m. speed test on cell phone .55/.43

9/22/20 Town Computer speed test 9.0/.7

The state required all municipalities to purchase VERIZON secure service to MODEM election results to Brown County Clerk's office immediately following the close of election; Our machine will not modem them in; We have NO VERIZON service at the Morrison Town Hall 3792 Park Road, Greenleaf; Following the August 4, 2020 election we had to load the machine into the car and drive around town until we were able to get bars of reception; We were in the driveway of a residence off of Cty Hwy W (between Park Rd & Hill Rd) At that location we had reception so from the vehicle we had to modem the election results into Brown County; After the Presidential election Nov 4, 2020 I will need to do the exact same thing; What if we have bad weather? What if we get Into an accident with the election machine inside the vehicle because no one can provide service to the Town of Morrison?



3/10/2022

Public Service Commission of Wisconsin 4822 Madison Yards Way P.O Box 7854 Madison, WI 53705 -9100

Subject: 2022 Broadband Expansion Grant - Town of Morrison

Dear Public Service Commission Representative:

I'm writing in support of U.S. Cellular's grant application for enhanced broadband and mobility services in the Town of Morrison, within Brown County.

Our Dairy Business will benefit from improved connectivity. We face daily challenges with the production and health of our dairy business, along with communication to other vendors. In our today's world technology is essential for all devices and communication, even on dairy farms. Our dairy farm needs and uses internet daily to retrieve important data and information about our cattle. We are able to monitor the health of our cattle with the use of internet based GPS ear tags.

Broadband access increases efficient health readings for our cattle, communication from fellow businesses, feed and animal bedding deliveries, marketing for milk, crops, fuel, and other raw materials across the state. Not to mention allow access to our local schools and businesses.

I encourage you to consider and approve this grant proposal to assist our community.

Thank You:

Collins Dairy LLC

3489 Hill Road

Greenleaf, WI 54126



March 9, 2022

Public Service Commission of Wisconsin 4822 Madison Yards Wgy P.O Box 7854 Madison, WI 53705 -9100

Subject: 2022 Broadband Expansion Grant - Town of Morrison

Dear Public Service Commission Representative:

I'm sending this letter supporting U.S. Cellular's grant application for enhanced broadband and mobility services in the Town of Morrison, within Brown County.

As the owner of Resurrection Small Engine Repair, I depend on a reliable fast internet connection in order to research the various engines that I work on, to determine specifications for engines, to order parts and check on delivery schedules.

Fast, reliable internet service is crucial to the success of my business.

I urge you to strongly consider the grant application.

Respectfully,

Tom Kempen

Owner, Resurrection Small Engine Repair

V20111@yahoo.com

920-858-9114





3838 Chema View Court. Greenear, Wt 54:26 * Office; (920; 86)-2702 * Fax, (920; 864-7)-12 * psyswagishoparkitericom

March 10, 2022

Public Service Commission of Wisconsin 4877 Madison Yards Way P.O. Box 7854 Madison, WI 53705-9100

Subject: 2022 Broadband Expansion Grant Town of Morrison

Dear Public Service Commission Representative:

I am writing on behalf of Wayside Parkview Estates an assisted I ving apartment complex located in southern Brown County, in the Township of Morrison. We offer 18 apartments for senior living. As our population is aging you should not be surprised by the computer interest our tenants have acquired. They continue to need support connecting with family, friends, newspapers, digital picture frames, and ordering supplies online. More inquires are being made to what their options are. Currently tenants have very few options with none being affordable or effective. I have had tenants make the tough decision to give up their technology because their care needs became greater than the availability of the broadpand. That's a choice I wish they wouldn't have to make.

I am sending a letter of support for UScellular's grant application for enhanced broadband and mobility services in the Town of Marrison. Investing in our community will not only support businesses, but also the children that reside in our community and the 5 school districts that they attend. This technology is also an investment in our future generations.

Thank you for considering the Town of Morrison in the grant application processes.

Respectfully, Baun Waster

Dawn Kaster, Community Director

Wayside Parkview Estates, LLC



My full time job is as a Travel Agent. When Covid-19 initially hit the US our company made the decision to have everyone work from home. I have a "MiFi" device from Cellcom as it is my only option for internet at home.

Because I am not hard wired, I was unable to work from home and had to drive into the office everyday, putting myself and my family at risk of being exposed to the virus. Even though there was no one else in my office, there are other businesses in the building. I was one of three out of 200+ employees who did not have the right service to work from home.

Several weeks ago we started a rotating furlough schedule with one agent working in the office each week. We are required to do an online health check in every day before entering the office. I have been repeatedly unable to get online from home so I need to sit in the McDonald's parking lot ½ mile from my office each morning to do my check in!

My employer sends regular updates on the state of the company as well as other need to know items via email. I need to travel to Kellnersville, to my sister's house (almost 10 miles) in order to connect and get this vital information on my furlough weeks.

Obviously I am able to connect some of the time otherwise I would not pay for the service. Unfortunately our Cellcom contract is not for unlimited minutes. This past month we went over our allotment causing us to have to pay an additional \$60 for data usage. I am convinced this is due to having to sign in again and again and having to wait to get a signal. I am lucky to get 3 bars on my MiFi.

I am sick of the inconvenience and additional costs we constantly have not being able to have a reliable internet service out here.

Laurie Daul 7637 River Rd Greenleaf WI 54126



Speed Tests Rick & Colleen Magley 4207 Hill Rd Greenleaf WI 54126

Home: HuesNet-Personal Laptop Computer

8/19/2020 7:35 a.m. 27.61/.23

8/19/2020 3:00 p.m. Could NOT Connect to internet

8/19/2020 3:06 p.m. 40.51/.16 (Said BAD)

8/19/2020 8:28 p.m. Could NOT Connect to internet

8/19/2020 8:30 p.m. 46.07/.18 (says BAD)

8/19/2020 8:34 kicked off, will not connect

8/19/2020 Continually trying to get online, will NOT connect

I am the Clerk for the Town of Morrison; I try to do a lot of work at home, 4207 Hill Rd;

I also have my own license cake business Colleen's Cakes-

I get a LOT of orders through email; Customers send pictures of how they want their cakes trimmed; Most brides send me many pictures of designs for their wedding cakes/flowers, etc;

I go on google to get ideas for designs for cakes; When the internet is NOT working I can not do my Job! My business REQUIRES me to be able to go online many times; Especially Friday's and Saturday mornings, when the internet is down (most of the time) I cannot get emails of orders/ or cake designs; I HAVE to have internet for my business; My wireless printer will not work because the internet is down so much; I am constantly re-setting it;

I have not received orders smalled me and have lost revenue because I did not see emails of orders due to the internet being down;

Something NEEDS to be done to bring reliable internet into the Town of Morrison;



I received phone calls-complaints from Victoria Flowers 7614 Morrison Rd Greenleaf;

April 2020 she requested an absentee ballot because she had to leave the town due to NO internet; In March when COVID hit-she was forced to work from home; She had POOR/NO reception; She spent days on the phone with Century Link they could not get her service; She could NOT work from home as required;

She left the Town Of Morrison to stay with a friend at 410 Willis Ave Ashland WI so she could do her required job working off site; She came back to her Morrison Rd home about Sept 6, 2020 and spent the next week on the phone with Century Link trying to get internet connection at her home; September 18, 2020 she had to leave her home in the town of Morrison-moved back up to Ashland WI because Century Link could NOT help her connect to the internet so she can work from home due to COVID;

This is a problem that residents have to leave their home, in the Town of Morrison because they can not get connected to the internet-something needs to be done to bring internet service to the Town of Morrison

To Whom It May Concern,

We live at 8122 Morrison Rd, Greenleaf, WI 54126, parcel M636. We have an internet business, and as you can imagine it is quite a challenge with crappy internet.

We are at the very end of Centurylink's line. It won't work at all, tried it. We used to have Globalnet, which was purchased by Baycom, which was purchased by Bertram. Those actually worked fairly well until channel 5, WFRV put new antenna's up. Bertram came to realign the dish and ended up leaving with the dish. Since then, we have had Cellcom mifi's, Hughes Net, and Viasat. They were all horrible and expensive. I ended up canceling all of them. Now we have a company called Firewifi out of Idaho. They use AT&T towers. It works ok, but yet again is expensive. This one is on the more reasonable end of expensive. \$100 for our home and \$100 for the office. Hughes Net and Viasat were around \$350 together.

It would be really nice if we were to get something that works and is reliable.

Thank you,

Joel & Marilyn Nies



September 18, 2020

Hillary Krahn Communications Director Zion Lutheran Church - Wayside 8378 County Rd W Greenleaf, WI 54126

To Whom It May Concern:

I'm writing on behalf of Zion Lutheran Church as both Communications Director and AV Coordinator in regards to our internet performance at the church. We use the internet for several functions of the church, many of which are impeded by our current slow service. Our most important function that is impeded is the Live Streaming of our worship services through Facebook. This service is especially valuable now due to many worshipers attending services from home to avoid meeting in person due to the COVID pandemic. While we are able to stream the services, we have to do so at a reduced audio and video quality, and many times, the service will freeze or lag or even stream without audio. This is frustrating for both staff trying to push the service out as it is for the viewers at home who are trying to watch. We cannot successful minister to our full congregation if we cannot properly stream worship.

Our current speed from our church computer is 18.7mbps down and 2mbps up. This is from a desktop computer that is plugged directly to Ethernet and used for our streaming. I imagine using WiFi would result in even slower results as the experience has been that the WiFi cuts in and out. We try to push our services from our Extron streaming device at a rate of 30fps which requires an audio bit rate of 96kbps and video bit rate of 4000kbps. Given the nature of what I do for the church, updating website, Facebook, uploading videos to, Facebook and YouTube, I personally have to do my work from home where my internet speed is 64mbps down and 11mbps up. Otherwise, uploads that normally take 5 minutes at home, would take me close to an hour working at the church. History provided from our former AV coordinator/IT person shows speed test of 1-2Mpbs up and down! This was when she started at the church in 2006. She had to do a lot of work to get the internet service up to 20mbps up and down (although this is not consistent). Which is still significantly slower than what is available just down the road from the church.

On a more personal note. When the school closed in March, I, as a mom, was tasked with finishing the school year with my two Zion students at home. We had Zoom meetings with my children's teachers and classmates at least once a week, sometimes twice. During these meetings, the Zion teachers were trying their hardest to teach in the isolation of their classroom through the internet, but the internet could not keep up with demand. We'd lose the teacher in the middle of the Zoom meeting, or they'd freeze and part of the lesson would be missed. It was frustrating for learning on both ends. And should this have to happen again during this school year, it would go much better with a faster internet speed. Education is important and missing it because of slow (or no) internet is unacceptable given the advances in technology. The technology and materials to provide a faster, higher quality, internet service to the building exist, however are being withheld.

These are just a few of the reasons I feel that there needs to be faster internet service provided to the church and school. I thank you in advance for considering the upgrade.

Sincerely, Hillary Krahn



Letter to Committee in Regard to Service...

From: Julie Ossmann (ossmann413@gmail.com)

ি : morrisoninternettestresults@yahoo.com

Date: Wednesday, September 9, 2020, 07:37 PM CDT

To whom it may concern:

As the school year has started, households in the township of Morrison find themselves using the internet more and more again. Most of the schools in our town have been back full-time, but however some are only back half-time and many families have opted for the virtual/homeschooling programs. With all these different scenarios on how school is being taught this year, the internet is a must in each household. Our household is struggling with connection. Our two children (12th grade & 10th grade) are using chromebooks almost 100 percent of the time for school work this year. This past week has seen multiple times with each child having to wait until their assignment "reconnects" to finish their homowork. This is with only two devices running on our CenturyLink WIFI as we know that no one else can be on during this time. I could not imagine if we had more children having to be on the computer for school work.

This past spring was a challenge as well. I was working from home and the kids were home doing school work 100% of the time. All three of us had to time out when we would be on so we would be able to complete the day's tasks at hand. Many times I would do my work at 430am so I would be done by the time the kids would need to start school. Our daughter was taking an advanced placement exam and went to another location to complete it in fear of her exam not being able to upload with our internet. This did happen to a student on Slager Rd just outside of the Marrison township.

Daily, my husband needs to content the internet to upload paperwork to his employer. This paperwork is crucial as this is how he is paid. There has been multiple times he had to wait until later to be able to do this as our service is not always able to handle it.

Sundays the internet is horrible. We can not do anything on our computers running on the WIFI. We have upgraded our phonos in unlimited data because we can not rely on our CenturyLink service, currently the only internet we can get to our address.

If you would like to discuss more of this with me, feel free to contact me at the below phone number.

Thank you, Julie Ossmann

Julie K. Ossmann

920.360.2101 7723 Clearing Ln., Greenleaf, WI 54126 ossmann413@gmail.com